## Building 26 - Excavation with Offsite Disposal

# **Capital Costs**

| Pre-design investigation borings  |                              | \$600   |
|---|------------------------------|---|
| Assume number of borings = Assume average depth (linear feet) = Cost per linear foot =  | 4<br>10<br>\$15              |   |
| 2. Excavation with Offbase Disposal   |                              | \$16,889  |
| A. Excavation of Sediments  |                              | \$1,606   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  |                              | 46<br>\$2.31<br>\$1,500                             |
| B. Post Excavation Confirmation Sampling Program  |                              | \$2,162   |
| Number of Confirmation Samples = Number of QA Samples = Sampling Cost per Sample Location (labor and equipment) = Data Validation Labor per Sample = Sample Analysis (per sample, includes 15% for CLP) TPH as Diesel 8015M | \$115                        | 5<br>1<br>\$208<br>\$55<br>\$132                    |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill  |                              | \$10,683  |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)   |                              | 58<br>\$179<br>\$300                                |
| D. Grading of Excavation Site   |                              | \$2,438   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   |                              | 58<br>\$3.58<br>\$2,230                             |
| SUBTOTAL CAPI<br>15% BID CONTIN<br>15% SCOPE CON<br>5% PERMITTING<br>TOTAL CAPITAL  | IGENCY<br>NTINGENCY<br>COSTS | \$17,489<br>\$2,623<br>\$2,623<br>\$874<br>\$23,610 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Building 26 - Excavation with Onsite Disposal

# **Capital Costs**

| Pre-design investigation borings  | \$600   |
|---|---|
| Assume number of borings = 4 Assume average depth (linear feet) = 10 Cost per linear foot = \$15  |   |
| 2. Excavation with Onbase Disposal  | \$6,582   |
| A. Excavation of Sediments  | \$1,606   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  | 46<br>\$2.31<br>\$1,500                           |
| B. Post Excavation Confirmation Sampling Program  | \$2,162   |
| Number of Confirmation Samples = Number of QA Samples = Sampling Cost per Sample Location (labor and equipment) = Data Validation Labor per Sample = Sample Analysis (per sample, includes 15% for CLP) TPH as Diesel 8015M \$115 | 5<br>1<br>\$208<br>\$55<br>\$132                  |
| C. Onbase Disposal  | \$376   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment  | 58<br>\$1.32<br>\$300                             |
| D. Grading of Excavation Site   | \$2,438   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   | 58<br>\$3.58<br>\$2,230                           |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS  | \$7,182<br>\$1,077<br>\$1,077<br>\$359<br>\$9,696 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Building 35/39 Area - Excavation with Offsite Disposal

# **Capital Costs**

| Excavation with Offbase Disposal  | \$12,877  |
|---|---|
| A. Excavation of Sediments  | \$1,558   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  | 25<br>\$2.31<br>\$1,500                             |
| B. Post Excavation Confirmation Sampling Program  | \$1,812   |
| Number of Confirmation Samples = Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 | 3<br>1<br>\$208<br>\$55<br>\$242                    |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill  | \$5,850   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)   | 31<br>\$179<br>\$300                                |
| D. Grading of Excavation Site   | \$2,341   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   | 31<br>\$3.58<br>\$2,230                             |
| E. Support of Outfall Pipeline  | \$1,317   |
| Volume required backfill (cubic yards) = Cost per cubic yard = Mobilization/Demobilization =  | 13<br>\$1.31<br>\$1,300                             |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS  | \$12,877<br>\$1,932<br>\$1,932<br>\$644<br>\$17,384 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Building 35/39 Area - Excavation with Onsite Disposal

# **Capital Costs**

| Excavation with Onbase Disposal   |  | \$7,368                                   |
|---|--|---|
| A. Excavation of Sediments  |  | \$1,558                                   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  |  | 25<br>\$2.31<br>\$1,500                   |
| B. Post Excavation Confirmation Sampling Program  |  | \$1,812                                   |
| Number of Confirmation Samples = Number of QA Samples Sampling Cost per Sample Location (labor a Data Validation Labor per Sample Sample Analysis (per sample, includes 15% Pesticides 8080 | ,  | 3<br>1<br>\$208<br>\$55<br>\$242<br>\$210 |
| C. Onbase Disposal  |  | \$341                                     |
| Volume of Soil25% swell factor (cubic yard<br>Transportation and Disposal Costs per Cubic<br>Mobilization/Demobilization of Equipment   |  | 31<br>\$1.32<br>\$300                     |
| D. Grading of Excavation Site   |  | \$2,341                                   |
| Volume of Soil25% swell factor (cubic yard:<br>Grading Cost per Cubic Yard<br>Mobilization/Demobilization of Equipment  | s)   | 31<br>\$3.58<br>\$2,230                   |
| E. Support of Outfall Pipeline  |  | \$1,317                                   |
| Volume required backfill (cubic yards) = Cost per cubic yard = Mobilization/Demobilization =  |  | 13<br>\$1.31<br>\$1,300                   |
|   | SUBTOTAL CAPITAL COS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGEN<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | \$1,1 <b>05</b><br>NCY \$1,1 <b>05</b>    |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Building 41 Area - Excavation with Offsite Disposal

# **Capital Costs**

| Pre-design investigation borings  |                 | \$1,080                          |
|---|-----------------|----------------------------------|
| Assume number of borings = Assume average depth (linear feet) = Cost per linear foot =  | 6<br>12<br>\$15 |                                  |
| 2. Excavation with Offbase Disposal   |                 | \$218,934                        |
| A. Excavation of Sediments  |                 | \$3,591                          |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  |                 | 907<br>\$2.31<br>\$1,500         |
| B. Post Excavation Confirmation Sampling Program  |                 | \$4,888                          |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) TPH as Diesel 8015M PAHs 8270 | \$115<br>\$210  | 7<br>1<br>\$208<br>\$55<br>\$374 |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill  |                 | \$203,270                        |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)   |                 | 1,134<br>\$179<br>\$300          |
| D. Grading of Excavation Site (ditch will remain operational)   |                 | \$6,289                          |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   |                 | 1,134<br>\$3.58<br>\$2,230       |

| E. Asphalt/Concrete Removal  |  | \$896  |
|--|--|--|
| Assume volume of concrete (cubic yards) =<br>Excavation costs per cubic yard =<br>Mobilization/Demobilization of equipment = |  | 120<br>\$0.80<br>\$800                                     |
|  | SUBTOTAL CAPITAL COSTS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGENCY<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | \$220,014<br>\$33,002<br>\$33,002<br>\$11,001<br>\$297,018 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Building 41 Area - Excavation with Onsite Disposal

# **Capital Costs**

| Pre-design investigation borings   | \$1,080                          |
|--|----------------------------------|
| Assume number of borings = 6 Assume average depth (linear feet) = 12 Cost per linear foot = \$15   |                                  |
| 2. Excavation with Onbase Disposal   | \$17,457                         |
| A. Excavation of Sediments   | \$3,591                          |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 907<br>\$2.31<br>\$1,500         |
| B. Post Excavation Confirmation Sampling Program   | \$4,888                          |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP)  TPH as Diesel 8015M \$115 PAHs 8270 \$210 | 7<br>1<br>\$208<br>\$55<br>\$374 |
| C. Onbase Disposal   | \$1,793                          |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 1,134<br>\$1.32<br>\$300         |
| D. Grading of Excavation Site  | \$6,289                          |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 1,134<br>\$3.58<br>\$2,230       |

| E. Asphalt/Concrete Removal  |  | \$896   |
|--|--|---|
| Assume volume of concrete (cubic yards) =<br>Excavation costs per cubic yard =<br>Mobilization/Demobilization of equipment = |  | 120<br>\$0.80<br>\$800                              |
|  | SUBTOTAL CAPITAL COSTS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGENCY<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | \$18,537<br>\$2,780<br>\$2,780<br>\$927<br>\$25,024 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## **Capital Costs**

| Pre-design investigation borings  | \$1,800                               |
|---|---------------------------------------|
| <b>5</b> 1 \  | 8<br>15<br>15                         |
| 2. Excavation with Offbase Disposal   | \$960,181                             |
| A. Excavation of Soils  | \$10,960                              |
| Volume of Soils (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  B. Post Excavation Confirmation Sampling Program  Number of Confirmation Samples  | 4,103<br>\$2.31<br>\$1,500<br>\$8,956 |
| Number of Commation Samples  Number of QA Samples  Sampling Cost per Sample Location (labor and equipment)  Data Validation Labor per Sample  Sample Analysis (per sample, includes 15% for CLP)  Total Metals 6010/7000 \$24  PAHs 8270 \$21 | 2<br>\$208<br>\$55<br>\$518           |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill  | \$918,474                             |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)   | 5,129<br>\$179<br>\$300               |
| D. Grading of Excavation Site   | \$20,591                              |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   | 5,129<br>\$3.58<br>\$2,230            |

| E. Asphalt/Concrete Removal  |  | \$1,200  |
|--|--|--|
| Assume volume of concrete (cubic yards) =<br>Excavation costs per cubic yards per hour =<br>Mobilization/Demobilization of equipment = |  | 500<br>\$0.80<br>\$800   |
|  | SUBTOTAL CAPITAL COSTS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGENCY<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | \$961,981<br>\$144,297<br>\$144,297<br>\$48,099<br>\$1,298,674 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Building 82/87/92/94 Area and Building 86 - Excavation with Onsite Disposal

## **Capital Costs**

| Pre-design investigation borings   | \$1,800                           |
|--|-----------------------------------|
| Assume number of borings = 8 Assume average depth (linear feet) = 15 Cost per linear foot = \$15   |                                   |
| 2. Excavation with Onbase Disposal   | \$48,759                          |
| A. Excavation of Soils   | \$10,960                          |
| Volume of Soils (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 4,103<br>\$2.31<br>\$1,500        |
| B. Post Excavation Confirmation Sampling Program   | \$8,956                           |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Total Metals 6010/7000 \$240 PAHs 8270 \$210 | 10<br>2<br>\$208<br>\$55<br>\$518 |
| C. Onbase Disposal   | \$7,052                           |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 5,129<br>\$1.32<br>\$300          |
| D. Grading of Excavation Site  | \$20,591                          |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 5,129<br>\$3.58<br>\$2,230        |

| E. Asphalt/Concrete Removal  |  | \$1,200   |
|--|--|---|
| Assume volume of concrete (cubic yards) = Excavation costs per cubic yards per hour = Mobilization/Demobilization of equipment = |  | 500<br>\$0.80<br>\$800                                |
|  | SUBTOTAL CAPITAL COSTS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGENCY<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | \$50,559<br>\$7,584<br>\$7,584<br>\$2,528<br>\$68,254 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch - Excavation with Offsite Disposal

# **Capital Costs**

| Excavation with Offbase Disposal   | \$3,334,820   |
|--|---|
| A. Excavation of Sediments   | \$34,460  |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 14,296<br>\$2.31<br>\$1,500                                       |
| B. Post Excavation Confirmation Sampling Program   | \$34,678  |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 Total Metals 6010/7000 \$240 | 40<br>6<br>\$208<br>\$55<br>\$518                                 |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill   | \$3,199,477   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)  | 17,870<br>\$179<br>\$300  |
| D. Grading of Excavation Site  | \$66,205  |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 17,870<br>\$3.58<br>\$2,230                                       |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS   | \$3,334,820<br>\$500,223<br>\$500,223<br>\$166,741<br>\$4,502,006 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch - Excavation with Onsite Disposal

# **Capital Costs**

| Excavation with Onbase Disposal  | \$159,170   |
|--|---|
| A. Excavation of Sediments   | \$34,460  |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 14,296<br>\$2.31<br>\$1,500                               |
| B. Post Excavation Confirmation Sampling Program   | \$34,678  |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 Total Metals 6010/7000 \$240 | 40<br>6<br>\$208<br>\$55<br>\$518                         |
| C. Onbase Disposal   | \$23,827  |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 17,870<br>\$1.32<br>\$300                                 |
| D. Grading of Excavation Site  | \$66,205  |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 17,870<br>\$3.58<br>\$2,230                               |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS   | \$159,170<br>\$23,875<br>\$23,875<br>\$7,958<br>\$214,879 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile A - Excavation with Offsite Disposal

# **Capital Costs**

| 1. Pre-design investigation borings  |   | \$180   |
|--|---|---|
| Assume number of borings = Assume average depth (linear feet) = Cost per linear foot =   | 4<br>3<br>\$15  |   |
| 2. Excavation with Offbase Disposal  |   | \$41,222  |
| A. Excavation of Sediments   |   | \$1,857   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   |   | 155<br>\$2.31<br>\$1,500                              |
| B. Post Excavation Confirmation Sampling Program   |   | \$1,409   |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipmed Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Total Metals 6010/7000 | ent)<br>\$240   | 2<br>1<br>\$208<br>\$55<br>\$276                      |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill   |   | \$35,031  |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)  |   | 194<br>\$179<br>\$300                                 |
| D. Grading of Excavation Site  |   | \$2,925   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  |   | 194<br>\$3.58<br>\$2,230                              |
| 15% BID<br>15% SC<br>5% PER  | TAL CAPITAL COSTS O CONTINGENCY OPE CONTINGENCY MITTING COSTS CAPITAL COSTS | \$41,402<br>\$6,210<br>\$6,210<br>\$2,070<br>\$55,892 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile A - Excavation with Onsite Disposal

#### **Capital Costs**

| Pre-design investigation borings  |  | \$180   |
|---|--|---|
| Assume number of borings = Assume average depth (linear feet) = Cost per linear foot =  | 4<br>3<br>\$15   |   |
| 2. Excavation with Onbase Disposal  |  | \$6,746   |
| A. Excavation of Sediments  |  | \$1,857   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  |  | 155<br>\$2.31<br>\$1,500                          |
| B. Post Excavation Confirmation Sampling Program  |  | \$1,409   |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equi Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLF Total Metals 6010/7000 |  | 2<br>1<br>\$208<br>\$55<br>\$276                  |
| C. Onbase Disposal  |  | \$555   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment  |  | 194<br>\$1.32<br>\$300                            |
| D. Grading of Excavation Site   |  | \$2,925   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   |  | 194<br>\$3.58<br>\$2,230                          |
|   | SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS | \$6,926<br>\$1,039<br>\$1,039<br>\$346<br>\$9,350 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile B - Excavation with Offsite Disposal

# **Capital Costs**

| 1. Pre-design investigation borings  |  |                | \$180  |
|--|--|----------------|--|
| Assume number of borings = Assume average depth (linear feet) = Cost per linear foot =   |  | 4<br>3<br>\$15 |  |
| 2. Excavation with Offbase Disposal  |  |                | \$91,208   |
| A. Excavation of Sediments   |  |                | \$2,358  |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   |  |                | 372<br>\$2.31<br>\$1,500                                 |
| B. Post Excavation Confirmation Sampling Program   |  |                | \$1,409  |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor an Data Validation Labor per Sample Sample Analysis (per sample, includes 15% fo Total Metals 6010/7000 | , , ,  | \$240          | 2<br>1<br>\$208<br>\$55<br>\$276                         |
| C. Offbase Disposal to a Class II Hazardous Waste La   | ndfill   |                | \$83,547   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Waste Profile Fee (One time cost)   |  |                | 465<br>\$179<br>\$300                                    |
| D. Grading of Excavation Site  |  |                | \$3,895  |
| Volume of Soil25% swell factor (cubic yards)<br>Grading Cost per Cubic Yard<br>Mobilization/Demobilization of Equipment  | )  |                | 465<br>\$3.58<br>\$2,230                                 |
|  | SUBTOTAL CAPITAL COS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGEN<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | NCY            | \$91,388<br>\$13,708<br>\$13,708<br>\$4,569<br>\$123,374 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile B - Excavation with Onsite Disposal

# **Capital Costs**

| 1. Pre-design investigation borings   |  | \$180  |
|---|--|--|
| Assume number of borings = Assume average depth (linear feet) = Cost per linear foot =  | 4<br>3<br>\$15   |  |
| 2. Excavation with Onbase Disposal  |  | \$8,574  |
| A. Excavation of Sediments  |  | \$2,358  |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  |  | 372<br>\$2.31<br>\$1,500                           |
| B. Post Excavation Confirmation Sampling Program  |  | \$1,409  |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equing Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLF Total Metals 6010/7000 |  | 2<br>1<br>\$208<br>\$55<br>\$276                   |
| C. Onbase Disposal  |  | \$912  |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment  |  | 465<br>\$1.32<br>\$300                             |
| D. Grading of Excavation Site   |  | \$3,895  |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   |  | 465<br>\$3.58<br>\$2,230                           |
|   | SUBTOTAL CAPITAL COSTS<br>15% BID CONTINGENCY<br>15% SCOPE CONTINGENCY<br>5% PERMITTING COSTS<br>TOTAL CAPITAL COSTS | \$8,754<br>\$1,313<br>\$1,313<br>\$438<br>\$11,817 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile D - Excavation with Offsite Disposal

## **Capital Costs**

| Excavation with Offbase Disposal  | \$44,625  |
|---|---|
| A. Excavation of Sediments  | \$1,894   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  | 171<br>\$2.31<br>\$1,500                              |
| B. Post Excavation Verification Sampling Program  | \$1,307   |
| Number of Verification Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 | 2<br>1<br>\$208<br>\$55<br>\$242                      |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill  | \$38,432  |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)   | 213<br>\$179<br>\$300                                 |
| D. Grading of Excavation Site   | \$2,993   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   | 213<br>\$3.58<br>\$2,230                              |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS  | \$44,625<br>\$6,694<br>\$6,694<br>\$2,231<br>\$60,244 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile D - Excavation with Onsite Disposal

# **Capital Costs**

| Excavation with Onbase Disposal  | \$6,774   |
|--|---|
| A. Excavation of Sediments   | \$1,894   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 171<br>\$2.31<br>\$1,500                          |
| B. Post Excavation Verification Sampling Program   | \$1,307   |
| Total Excavated Area (Acres) Number of Verification Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 | 0.11<br>2<br>1<br>\$208<br>\$55<br>\$242          |
| C. Onbase Disposal   | \$580   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 213<br>\$1.32<br>\$300                            |
| D. Grading of Excavation Site  | \$2,993   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 213<br>\$3.58<br>\$2,230                          |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS   | \$6,774<br>\$1,016<br>\$1,016<br>\$339<br>\$9,144 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile E - Excavation with Offsite Disposal

## **Capital Costs**

| Excavation with Offbase Disposal  | \$41,857  |
|---|---|
| A. Excavation of Sediments  | \$1,864   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment  | 158<br>\$2.31<br>\$1,500                              |
| B. Post Excavation Confirmation Sampling Program  | \$1,307   |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 | 2<br>1<br>\$208<br>\$55<br>\$242                      |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill  | \$35,747  |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)   | 198<br>\$179<br>\$300                                 |
| D. Grading of Excavation Site   | \$2,939   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment   | 198<br>\$3.58<br>\$2,230                              |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS  | \$41,857<br>\$6,279<br>\$6,279<br>\$2,093<br>\$56,507 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

# Perimeter Drainage Ditch Spoils Pile E - Excavation with Onsite Disposal

#### **Capital Costs**

| Excavation with Onsite Disposal  | \$5,701                                       |
|--|---|
| A. Excavation of Sediments   | \$1,864                                       |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 158<br>\$2.31<br>\$1,500                      |
| B. Post Excavation Verification Sampling Program   | \$1,307                                       |
| Total Excavated Area (Acres) Number of Verification Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Pesticides 8080 \$210 | 0.10<br>2<br>1<br>\$208<br>\$55<br>\$242      |
| C. Onsite Disposal   | \$300   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 0<br>\$1.32<br>\$300                          |
| D. Grading of Excavation Site  | \$2,230                                       |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 0<br>\$3.58<br>\$2,230                        |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS   | \$5,701<br>\$855<br>\$855<br>\$285<br>\$7,697 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile F - Excavation with Offsite Disposal

## **Capital Costs**

| Excavation with Offbase Disposal   | \$135,041   |
|--|---|
| A. Excavation of Sediments   | \$2,766   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 549<br>\$2.31<br>\$1,500                                  |
| B. Post Excavation Confirmation Sampling Program   | \$4,478   |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Total Metals 6010/7000 \$240 Pesticides 8080 \$210 | 5<br>1<br>\$208<br>\$55<br>\$518                          |
| C. Offbase Disposal to a Class II Hazardous Waste Landfill   | \$123,111   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Waste Profile Fee (One time cost)  | 686<br>\$179<br>\$300                                     |
| D. Grading of Excavation Site  | \$4,686   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 686<br>\$3.58<br>\$2,230                                  |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS   | \$135,041<br>\$20,256<br>\$20,256<br>\$6,752<br>\$182,305 |

#### **O&M Costs**

No O&M costs are associated with this alternative.

## Perimeter Drainage Ditch Spoils Pile F - Excavation with Onsite Disposal

## **Capital Costs**

| Excavation with Onbase Disposal  | \$13,133  |
|--|---|
| A. Excavation of Sediments   | \$2,766   |
| Volume of Sediments (cubic yards) Excavation Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 549<br>\$2.31<br>\$1,500                            |
| B. Post Excavation Confirmation Sampling Program   | \$4,478   |
| Number of Confirmation Samples Number of QA Samples Sampling Cost per Sample Location (labor and equipment) Data Validation Labor per Sample Sample Analysis (per sample, includes 15% for CLP) Total Metals 6010/7000 \$240 Pesticides 8080 \$210 | 5<br>1<br>\$208<br>\$55<br>\$518                    |
| C. Onbase Disposal   | \$1,203   |
| Volume of Soil25% swell factor (cubic yards) Transportation and Disposal Costs per Cubic Yard Mobilization/Demobilization of Equipment   | 686<br>\$1.32<br>\$300                              |
| D. Grading of Excavation Site  | \$4,686   |
| Volume of Soil25% swell factor (cubic yards) Grading Cost per Cubic Yard Mobilization/Demobilization of Equipment  | 686<br>\$3.58<br>\$2,230                            |
| SUBTOTAL CAPITAL COSTS 15% BID CONTINGENCY 15% SCOPE CONTINGENCY 5% PERMITTING COSTS TOTAL CAPITAL COSTS   | \$13,133<br>\$1,970<br>\$1,970<br>\$657<br>\$17,729 |

#### **O&M Costs**

No O&M costs are associated with this alternative.